Commonwealth of Kentucky Division for Air Quality

PERMIT APPLICATION SUMMARY FORM

Completed by: Joshua J. Higgins

GENERAL INFORMATION:	
Name: Address: Date application received: SIC/Source description: Plant I. D. Application log number:	Ahlstrom Engine Filtration, Inc. 215 Nebo Rd., Madisonville, KY 42431 December 20, 1999 2621/ Paper Mills 021-107-00028 51224/5473
Permit number:	V-04-021
APPLICATION TYPE/PERMIT ACTIVITY [X] Initial issuance [] Permit modification Administrative Minor Significant [] Permit renewal	[] General permit [] Conditional major [X] Title V [] Synthetic minor [X] Operating [] Construction/operating
COMPLIANCE SUMMARY: [] Source is out of complia [X] Compliance certification	
APPLICABLE REQUIREMENTS LIST: [] NSR [] PSD [X] Netted out of PSD/NSR	[] NSPS [] SIP [X] NESHAPS [] Other [] Not major modification per 401 KAR 51:017, 1(23)(b) or 51:052,1(14)(b)
[] Source provided terms for [X] Source subject to a MAGE [] Source requested case-by [] Application proposes ne [X] Certified by responsible [X] Diagrams or drawings in	official ncluded formation (CBI) submitted in application assures

EMISSIONS SUMMARY:

Pollutant	Actual (tpy)	Potential (tpy)
PM/PM_{10}	8.38	9.01
SO_2	2.24	4.11
NOx	60.14	69.23
СО	50.67	55.44
VOC	604.87	604.87
LEAD	1.28 x 10 ⁻⁴	1.28 x 10 ⁻⁴
HAP ≥ 10 tpy (by CAS)		
Formaldehyde (50-00-0) Methanol (67-56-1) Phenol (108-95-2) Triethylamine (121-44-8)	41.22 518.27 18.39 8.95	41.22 518.27 18.39 8.95
Total HAPs:	586.83	586.83

SOURCE PROCESS DESCRIPTION:

Ahlstrom Engine Filtration, LLC, owns and operates a paper filter manufacturing facility in Madisonville, KY. Based on customer needs, the paper making process begins with mixing wood pulp, cotton linters pulp, glass fibers, or polyester fibers with water in the paper machines hydrapulper. These raw materials are shipped onto the facility and stored in a warehouse until needed (i.e., not manufactured by Ahlstrom). The wet slurry from the hydrapulper is passed through a series of screens and metal drums to produce a wide single continuous sheet of paper at a specified thickness. The paper is dried using hot drums and a Honeycomb Through-Air Dryer (TAD). The paper is passed through a resin saturator containing an alcohol-resin mixture that contains hazardous air pollutants (HAPs). The coated paper is wound onto a spool and hung in the mull rack for several hours to allow the solvent to penetrate and saturate the paper fibers. Once saturated, the paper is unwound and passed through the Pre-dryer and the Cure Oven to cure and volatilize remaining organic solvents. The hot, dry paper is then rewound onto another spool and allowed to cool in preparation for cutting to customer specifications. The finished product is stored in a warehouse until ready for shipment.